PONY

سلسلة كتب الأستاذ

Final Revision

ICT

1th

Secondary

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Questions Final Revision

1 Choose the correct answer from the following:

1. Which of the following represents 'Information'?
   a. Raw facts
   b. Something that carries meaning or value to the recipient
   c. Unclear symbols
   d. Only numbers
2. Knowledge means:
   a. Copying information
   b. Organizing and analyzing information to solve problems
   c. Raw data
   d. Rumors
3. Which of the following is an example of hardware?
   a. Mouse b. Word program
   c. Operating System d. Messaging application
4. What does the term "Hardware" refer to?
   a. Software
   b. Digital data
   c. The hardware devices of the computer
   d. Programing instructions
5. Which of the following is NOT a component of a Full Adder circuit?
   a. AND b. OR c. XOR d. NAND
6. What is the output of a NOT circuit if the input = 1?
   a. 0 b. 1 c. 2 d. Nothing
7. System software is used to:
   a. Operate and manage hardware b. Create documents
   c. Play video clips d. Browse the internet
8. Which of the following is not system software?
   a. Windows b. macOS c. Photoshop d. Linux

9. What is the relationship between hardware and software?
   a. Hardware runs without software
   b. Software runs on hardware to operate the computer
   c. There is no relationship between them
   d. Hardware is a part of software
10. Which of the following is considered application software?
   a. Word b. Windows c. BIOS d. Linux
11. What controls the communication between hardware and software?
   a. The Operating System b. The user
   c. The input unit d. The screen
12. What is meant by "System Software"?
   a. Programs used directly by the user
   b. Programs that control the operation of hardware and other programs
   c. Programs for designing images
   d. Programs for browsing the web
13. What is meant by a Logical Operation?
   a. A calculation using decimal numbers
   b. An operation performed using binary numbers 0 and 1
   c. A graphical process for drawing circuits
   d. A process of storing data in memory
14. A Logic Circuit is used for:
   a. Converting signals into images
   b. Executing logical operations
   c. Storing data
   d. Sending data over the internet
15. Which of the following gates outputs (1) only when all inputs are (1)?
   a. OR b. AND c. NOT d. XOR
16. Which of the following describes the Inverter (NOT) circuit?
   a. It outputs the same value as the input
   b. It outputs the opposite of the input value
   c. It outputs the sum of the inputs
   d. It does not output any value

17. Which of the following describes the function of an OR gate?
    a. It outputs 1 only when all inputs are 1
    b. It outputs 1 if at least one input is 1
    c. It always outputs 0
    d. It outputs 1 when the inputs are equal
18. A Truth Table is used for:
    a. Storing data
    b. Showing the outputs for all possible input combinations
    c. Drawing circuits
    d. Translating programs
19. What is the output of an AND gate if the inputs are (1 and 0)?
    a. 0 b. 1 c. 2 d. Nothing
20. What is the function of a Half Adder circuit?
    a. Adding two decimal numbers
    b. Adding two single-bit binary numbers
    c. Subtracting two numbers
    d. Converting one number to another
21. A Half Adder circuit consists of:
    a. An AND gate and an OR gate b. An AND gate and a NOT gate
    c. An AND gate and an XOR gate d. An OR gate and a NOT gate
22. What is the difference between a Half Adder and a Full Adder?
    a. The Full Adder accounts for the Carry-in
    b. The Half Adder is faster at calculation
    c. The Full Adder uses only one input
    d. The Half Adder only works for logical operations
23. In a Full Adder circuit, the number of inputs is:
    a. 2 b. 3 c. 4 d. 1
24. In the truth table for an OR gate, when the inputs are (0 and 0), the output is:
    a. 0 b. 1
    c. Depends on the gate d. Undefined

25 In a Full Adder circuit, the symbol C refers to:

a. Carry b. Sum c. A third input d. Power line

26 The function of a truth table is to:

a. Show all possible input and output combinations

b. Save programming commands

c. Analyze images

d. Display only binary values

27 The circuit that outputs the opposite of the input is called:

a. OR b. NOT c. AND d. XOR

28 A Full Adder circuit handles:

a. Only one bit b. Two bits and three inputs

c. Two bits and only two inputs d. Four inputs

29 When adding 1 and 1 in the binary system, the result is:

a. 0 b. 1 c. 10 d. 11

30 The function of a Half Adder circuit is to calculate:

a. The Sum only b. Both the Sum and the Carry

c. Subtraction d. Division

31 The logic circuit that outputs 1 only when the inputs are different is called:

a. XOR b. OR c. AND d. NOR

32 Which of the following describes a Full Adder?

a. It includes only two inputs

b. It includes 3 inputs and produces two outputs (Sum and Carry)

c. It produces only one output

d. It does not contain an XOR gate

33 In logic circuits, the value (1) means:

a. False b. True c. Null d. Off

34 Knowledge means:

a. Copying information.

b. Analyzing and organizing information to solve problems.

c. Raw data.

d. Rumors.

35 Which of the following malware replicates itself and spreads across the internet?

a. Trojan Horse b. Worm c. Spyware d. Ransomware

36 The basic unit of information is:

a. 1 Megabyte b. 1 Kilobyte c. 1 Byte d. 1 Bit

37 Which of the following is considered a violation of information ethics?

a. Verifying sources.

b. Publishing copyrighted images without permission.

c. Respecting privacy.

d. Avoiding cyberbullying.

38 The duration of protection for patents is:

a. 7 years b. 10 years c. 20 years d. 50 years

39 The number of possible combinations to represent 3 bits is:

a. 2 b. 4 c. 8 d. 16

40 Which of the following rights protects the economic interests of celebrities?

a. Right to privacy.

b. Image rights.

c. Right of publicity (or Publicity Rights).

d. Copyrights.

41 Which of the following cybercrimes relies on using another person's username or password?

a. Network crimes.

b. Violation of the unauthorized access law.

c. Manipulation of stored data.

d. Phone fraud.

42 Which of the following is an example of knowledge-based authentication?

a. Fingerprint. b. Smart card.

c. Password and PIN code. d. SMS verification.

43 Which of the following is an example of digital character encoding?

a. ASCII
b. Sans-serif
c. Semi-cursive
d. Font

44 The hexadecimal code for the character "H" in the string "Hello" is:

a. 65
b. 48
c. 6C
d. 6F

45 What is the ten's complement of the number 635 in the decimal system?

a. 365
b. 365
c. 375
d. 395

46 Which of the following elements is essential for displaying characters on a computer screen?

a. Font only.
b. Encoding only.
c. Encoding + Font.
d. Hexadecimal system.

47 Which of the following causes character corruption?

a. Mismatch between encoding and decoding systems.
b. Slow computer speed.
c. Different font types.
d. Low Random Access Memory (RAM).

48 In computers, the subtraction operation is performed using:

a. Addition using complements
b. Multiplication by the complement of the number
c. Conversion to the decimal system
d. Direct subtraction

49 The character "H" in the string "Hello" is represented in hexadecimal by the code:

a. C6
b. 65
c. 48
d. F6

50 To display characters on a computer screen, we need:

a. Font only
b. Encoding only
c. Encoding and Font together
d. Hexadecimal encoding only

51 What is the ten's complement of the number 71 in the decimal system?

a. 18
b. 29
c. 29
d. 31

52 Which of the following is considered a primary source of information?

a. School textbook
b. A personal experience report
c. Daily newspaper
d. Television program

53 Communication and transmission media include:

a. DVD Discs
b. Radio and Television
c. Pictures and Texts
d. Cloud Storage

54 Which of the following is considered a violation of information ethics?

a. Verifying sources
b. Publishing copyrighted pictures without permission
c. Respecting privacy
d. Not using electronic passwords

55 Which of the following is considered identity theft?

a. Sharing a video
b. Pretending to be someone else and stealing their account
c. Using a phone while walking
d. Spreading rumors

56 Which of the following is considered basic personal data?

a. National ID number
b. Fingerprint
c. Date of birth
d. Health condition

57 Which of the following rights protects the economic interests of creators?

a. Privacy rights
b. Copyrights
c. Advertising rights
d. Publishing rights

58 The license that organizations obtain to confirm their commitment to data protection is called:

a. Objection system
b. Privacy policy
c. Personal Data Protection License
d. Prior consent system

59 Which of the following is considered secondary information?

a. Results of a new survey

b. Reports of personal experiences

c. A published scientific book

d. Field survey

60 Which of the following rights is recognized by law and the judiciary?

a. Publishing rights b. Copyrights

c. Intellectual property rights d. Privacy rights

61 The system that requires explicit consent from the user before providing a service is called:

a. Objection system b. Privacy policy

c. Prior consent system d. License

62 The Patent Rights protection period is:

a. 7 years b. 10 years c. 20 years d. 50 years

63 Which of the following is considered a neighboring right to copyright?

a. Design rights

b. Performers' rights such as singers and actors

c. Trademark rights

d. Utility model rights

64 Which of the Creative Commons licenses allows the use of a work provided the author's name is mentioned?

a. Non-commercial (NC) b. No derivatives (ND)

c. Credit to creator (BY) d. Same terms for adaptations (SA)

65 Which of the following malware replicates itself and spreads over the internet?

a. Trojan horse b. Worm c. Spyware d. Ransomware

66 Which of the following cybercrimes depends on using another person's username or password?

a. Cybercrimes
b. Violation of unauthorized access law
c. Manipulation of stored data
d. Phone fraud

67 The purpose of copyright is:

a. Ensuring fair use and protecting rights
b. Preventing all forms of quotation
c. Allowing infringement of intellectual property rights
d. Using works for commercial purposes only

68 Which of the industrial property rights protects the shape or structure of a product?

a. Trademark rights
b. Design rights
c. Utility model rights
d. Patent

69 The protection period of copyright lasts:

a. The lifetime of the creator only
b. 20 years from the date of publication
c. The creator's lifetime + 50 years after death
d. A fixed 100 years

70 Which of the following threats collects personal information without the user's knowledge?

a. Ransomware
b. Spyware
c. Viruses
d. Trojan horse

71 One-Time Password (OTP) means:

a. A password that never changes.
b. A password that can be used multiple times.
c. A password that changes periodically and is used only once.
d. A password based on the date of birth.

72 Which of the following is an example of knowledge-based authentication?

a. Fingerprint.
b. Smart card.
c. Password and PIN.
d. SMS verification.

73 Two-step authentication relies on:

a. Two different types of factors.
b. Two pieces of information of the same type of factor.
c. Fingerprint + password.
d. SMS code + smart card.

74 The number of possible probabilities to represent 3 bits is:

a. 2 b. 4 c. 8 d. 16

75 The basic unit of information is:

a. 1 megabyte b. 1 kilobyte c. 1 byte d. 1 bit

76 Which of the following is an example of digital character encoding?

a. ASCII b. Sans-serif c. Semi-cursive d. Font

77 One of the causes of character corruption is:

a. Weak processor speed.
b. Mismatch between encoding and decoding methods.
c. Low storage capacity.
d. Different font types.

78 Which of the following elements are necessary to display characters on a computer screen?

a. Font only.
b. Encoding only.
c. Encoding + Font.
d. Hexadecimal system.

79 The letter "H" in the string "Hello" is represented in the hexadecimal system by the symbol:

a. 6C b. 65 c. 48 d. 6F

80 Complements are used to represent ..... in computers.

a. positive numbers b. negative numbers

c. decimal numbers d. all of them

81 The connection standard that transmits audio and video over a single cable is:

a. USB b. HDMI c. Ethernet d. VGA

82 To calculate the 9's Complement of a decimal number, you subtract each digit from:

a. 10 b. 9 c. 5 d. 1

83 What is the 9's Complement of the number 635?

a. 635 b. 365 c. 463 d. 364

84 ..... is the term that refers to visually representing data to make it more understandable.

a. Abstraction b. Pictogram c. Structuring d. Visualization

85 The smallest unit that defines the shape of a digital image is ..... .

a. Resolution unit (dpi) b. The Pixel

c. Sampling d. Encoding

86 What is the function of the operating system?

a. Increase internet speed

b. Control hardware functions and run programs

c. Only save files

d. Temporarily shut down the computer

87 what is the Two's Complement of the binary number 0101 (2) ?

a. 1010 (2) b. 1011 (2) c. 0101 (2) d. 0001 (2)

88 Programs and data are stored temporarily in ..... .

a. Main memory. b. Secondary memory.

c. Arithmetic Unit. d. Input Unit.

89 What is the relationship between the 9's Complement and the 10's Complement?

a. The 10's Complement is the 9's Complement minus 1.
b. The 10's Complement is the 9's Complement plus 1.
c. The 10's Complement is the 9's Complement multiplied by 10.
d. The 10's Complement is the 9's Complement divided by 10.

90 What is the One's Complement of the binary number 0101?

a. 0101 (2) b. 1011 (2) c. 1010 (2) d. 0110 (2)

91 If an image has a resolution of X pixels (vertical) × Y pixels (horizontal), and each pixel is represented by Z bits, the correct equation for calculating the data size (in bits) is ..... .

a. X x Y
b. X x Y x Z
c Z. + (X x Y)
d. X x Y x {Number of primary colors}

92 In the method of subtraction using complements, which operation does a computer use instead of subtraction?

a. Multiplication b. Division
c. Addition d. Subtraction itself

93 To calculate the 10's complement of the number 29, you first find its 9's complement, which is 70, What is the 10's Complement?

a. 70 b. 71 c. 69 d. 80

94 Which of the following is considered system software?

a. Operating System b. Excel program
c. PowerPoint program d. Browser application

95 How do you get the Two's Complement from the One's Complement?

a. By flipping the bits again.
b. By subtracting (2) 1 from the One's Complement.
c. By adding (2) 1 to the One's Complement.
d. By ignoring the leading digit.

96 When subtracting using complements, what should you do with the final carry digit?

a. Add it to the next digit.
b. Multiply it by two.
c. Leave it as it is.
d. Ignore it.

97 In the binary system, what do you do to each bit to find the One's Complement?

a. Multiply it by 2.
b. Subtract it from 10.
c. Invert it (flip it) from 0 to 1 and 1 to 0.
d. Add 1 to it.

98 In subtraction using complements, you must first find the complement of the ..... .

a. Subtracted from.
b. Subtrahend
c. Final result.
d. Leading digit.

99 Which of the following is considered a hardware component?

a. Operating System
b. Internet Browser
c. Excel Application
d. Central Processing Unit (CPU)

100 In the decimal subtraction 8 - 6 using complements, you add 8 to the 10's complement of 6 (which is 4). What is the result of this addition before you ignore the carry digit?

a. 2
b. 4
c. 12
d. 8

101 Secondary memory is used for.....

a. Storing data temporarily.
b. Executing instructions quickly.
c. Long-term storage of data and programs.
d. Controlling data flow.

102 what is the experience or emotional effect users get from interacting with a product or service?

a. User Interface (UI)
b. Graphical User Interface (GUI)
c. User Experience (UX)
d. Affordance

103 What is the main disadvantage of the Bitmap format compared to the Vector format?

a. It reduces the number of pixels in the image.
b. It only allows for representing text and shapes.
c. It causes symbols to appear unreadable when printed.
d. Jaggies appear when the image is enlarged.

104 According to the LATCH principle, which type of classification is based on the sequence of events over time?

a. Location b. Alphabet c. Time d. Category

105 In the 24-bit full color system, what is the number of color levels that can be represented for a single primary color (like Red)?

a. 8 levels b. 24 levels c. 256 levels d. 224 levels

106 What is meant by Software?

a. The hardware devices of the computer
b. The programs and data that run on the hardware
c. Only the computer's memory
d. The network components

107 What is the concept that refers to how easily data and services can be accessed by a wide range of people, including those with special needs?

a. Affordance b. Usability
c. Accessibility d. Universal design

108 What are the three primary colors of light which, when mixed, increase in brightness and approach white?

a. Cyan, Magenta, and Yellow b. Red, Green, and Blue
c. Violet, Yellow, and Black d. White, Gray, and Black

109 What is the interface where icons and buttons are used in an easy-tounderstand way to exchange information between humans and devices?

a. Command Line Interface (CUI) b. User Interface (UI)
c. Graphical User Interface (GUI) d. User Experience (UX)

110 According to the LATCH principle, which type of classification is based on the differences between things and is used as an axis to distinguish domains?

a. Location b. Alphabet c. Time d. Category

111 A computer consists of five main components, which are:

a. Control Unit, Arithmetic Unit, Memory Unit, Input Unit, Output Unit.

b. Screen, Mouse, Printer, Keyboard, Storage Unit.

c. Processor, Motherboard, Battery, Hard Drive, Screen.

d. Input Unit, Output Unit, Network Unit, Cooling Unit, Arithmetic Unit.

112 Examples of input units ..... .

a. Screen and Printer. b. Keyboard and Scanner.

c. Hard Drive and SSD. d. Speakers and Wireless Mouse.

113 The relationship between the five computer components depends on:

a. Data flow and control flow between the units.

b. Only the speed of the hard drive.

c. Screen size and display resolution.

d. The type of operating system used.

114 The Control Unit and the Arithmetic Unit are known together as .....

a. Input Unit. b. Memory Unit.

c. Central Processing Unit (CPU). d. Storage Unit.

115 The standard used to connect computers within Local Area Networks (LAN) is ..... .

a. HDMI. b. Bluetooth. c. Ethernet. d. USB.

116 USB is typically used to connect ..... .

a. Network devices only.

b. Peripheral devices such as printers.

c. Internal storage units.

d. Audio systems only.

117 The function of the Control Unit is……

a. Executing instructions and issuing commands to the other units.

b. Storing data temporarily.

c. Processing data only.

d. Outputting the final information.

118 What is meant by an "Interface"?

a. A program that manages hardware.

b. A component that mediates information exchange between the computer and peripheral devices.

c. An internal storage unit.

d. The operating system for peripheral devices.

119 …… is the most widely used interface for peripheral.

a. HDMI b. Ethernet c. USB d. CPU

2 Put (✓) or (✗) in Front of the following sentences:

1. Data are raw facts represented in the form of numbers, letters, or symbols. (....)
2. One of the characteristics of information is that it completely disappears after being published on the Internet. (....)
3. Secondary information is obtained from three parties such as books and research. (....)
4. Videos, pictures, and texts are examples of communication media. (....)
5. Information literacy means the ability to interpret information accurately. (....)
6. Respecting copyright and privacy is part of information ethics. (....)
7. Internet addiction and using a phone while walking are among the problems related to smartphones. (....)
8. Religion, health condition, and race are considered sensitive personal data. (....)
9. Privacy policies in companies aim to explain how customer data is collected and protected. (....)
10. Intellectual property rights are divided into industrial property rights and copyright. (....)
11. The Formality principle means that copyright is established only after officially registering the work. (....)
12. Industrial property rights include patent Right and trademarks. (....)
13. Copyright is established at the moment of creation and does not require registration. (....)
14. Industrial property rights include patent Right and trademarks. (....)
15. Copyright is established at the moment of creation and does not require registration. (....)
16. Confidentiality, integrity, and availability are essential elements of information security. (....)
17. Ransomware is used to protect data and prevent loss. (....)
18. A password is a string of characters used to verify that a user is legitimate. (....)

19 It is preferable for the password to be short so that it is easy to remember. (....)

20 Biometric authentication relies on characteristics such as fingerprints and irises. (....)

21 In two-factor authentication, two different types of factors are used for verification. (....)

22 A bit can represent more than two states at the same time. (....)

23 1 byte equals 8 bits and can represent 256 different probabilities. (....)

24 The hexadecimal system uses numbers from 0 to 9 and letters from A to F. (....)

25 When converting from binary to hexadecimal, the binary number is divided into groups of 8 bits. (....)

26 ASCII code supports all languages, including Arabic. (....)

27 Unicode standard was designed to collect character symbols from different world languages into one system. (....)

28 Encoding is the process of converting digital data into readable characters. (....)

29 Font is the shape data of characters corresponding to character symbols. (....)

30 The final step in subtraction is to ignore the leading digit. (....)

31 Pictograms use words to express information (....)

32 A digital image is made up of small units called pixels. (....)

33 Word processing software is a type of system software. (....)

34 Secondary memory is used for temporary storage. (....)

35 Complements are used to represent positive numbers. (....)

36 Quantization of an image assigns numbers to brightness. (....)

37 GUI uses icons and buttons for easy interaction. (....)

38 The control unit and arithmetic unit together form the CPU. (....)

39 Subtraction in computers is done using addition with complements. (....)

40 In sampling, The image is divided into pixels. (....)

41 Input devices like keyboard and mouse output information. (....)

42 A driver is a type of hardware. (....)

43 The unit of resolution is dpi (....)

44 LATCH method makes information harder to understand. (....)

45 The Main memory manages the flow of control. (....)

46 24-bit full color uses 8 bits for each primary color. (....)

47 Icons represent a program's content visually. (....)

48 An interface mediates data exchange between the computer and peripherals. (....)

49 Subtractive color mixing is used to represent colors in computer screens. (....)

50 Android OS is an example of application software. (....)

51 The control unit performs calculations in the computer. (....)

52 Higher resolution images have fewer pixels than lower resolution images. (....)

Answers Final Revision

1

1 b	2 b	3 a	4 c	5 d	6 a	7 a	8 c	9 b	10 a	11 a	12 b
13 b	14 b	15 b	16 b	17 b	18 b	19 a	20 b	21 c	22 a	23 b	24 a
25 a	26 a	27 b	28 b	29 c	30 b	31 a	32 b	33 b	34 b	35 b	36 c
37 b	38 c	39 c	40 c	41 b	42 c	43 a	44 b	45 a	46 c	47 a	48 a
49 c	50 c	51 b	52 b	53 b	54 b	55 b	56 c	57 b	58 c	59 c	60 d
61 c	62 c	63 b	64 c	65 b	66 b	67 a	68 c	69 c	70 b	71 c	72 c
73 b	74 c	75 c	76 a	77 b	78 c	79 c	80 b	81 b	82 b	83 d	84 d
85 b	86 b	87 b	88 a	89 b	90 c	91 b	92 c	93 b	94 a	95 c	96 d
97 c	98 b	99 d	100 c	101 c	102 c	103 d	104 c	105 c	106 b	107 c	108 b
109 c	110 d	111 a	112 b	113 a	114 c	115 c	116 b	117 a	118 b	119 c	

2

1 T	2 F	3 T	4 F	5 T	6 T	7 T	8 T	9 T	10 T	11 F	12 T
13 T	14 T	15 T	16 T	17 F	18 T	19 F	20 T	21 T	22 F	23 T	24 T
25 F	26 F	27 T	28 F	29 T	30 T	31 F	32 T	33 F	34 F	35 F	36 T
37 T	38 T	39 T	40 T	41 F	42 F	43 T	44 F	45 F	46 T	47 T	48 T
49 F	50 F	51 F	52 F								